

## ABSTRACT OF THE DISCLOSURE

Patches are accurately printed while avoiding an excessive application of color materials such as ink or toner. On the basis of these patches, a conversion relationship for an accurate color transformation is obtained. Specifically, if any of the patches has a total color material use amount exceeding a maximum total color material use amount determined on the basis of the absorption of ink by printing medium or the like, signal values for this patch are converted so that its total color material use amount does not exceed the maximum total color material use amount. Then, within the range of colorimetric data on patches outputted on the basis of the patch data, a target color having the highest saturation is determined for each hue. Thus, combinations of color materials in a table obtained on the basis of the set target do not exceed the maximum total color material use amount.